

### **REMARKS**

The applicant has carefully considered the official action mailed on May 18, 2007, and the references cited therein. In the official action, claims 1-4 and 6-21 were rejected under 35 U.S.C. §112, first paragraph, as allegedly being a single means claim with under breadth, claims 1-4, 6, 8, 11-14, 16, 22-25, 27, and 29 were rejected under 35 U.S.C. §103(a) as unpatentable over Van Der Vleuten et al. (U.S. Patent No. 6,535,845) in view of Jensen et al. (U.S. Patent No. 6,421,445), claims 7, 15, and 28 were rejected under 35 U.S.C. §103(a) as unpatentable over Van Der Vleuten et al. in view of Jensen et al. and Best et al. (U.S. Patent No. 5,113,437), claims 9, 17, and 30 were rejected under 35 U.S.C. §103(a) as unpatentable over Van Der Vleuten et al. in view of Jensen et al. and Scheirer et al. (U.S. Patent No. 6,363,175), claims 10 and 31 were rejected under 35 U.S.C. §103(a) as unpatentable over Van Der Vleuten et al. in view of Jensen et al. and Osawa (U.S. Patent No. 6,167,160). Additionally, claims 18-21, 32-38, 40, and 41 were objected to based on minor informalities, and claims 18-21, 32-38, 40, and 41 were allowed pending withdrawal of aforementioned rejections based on 35 U.S.C. §112, first paragraph.

By way of this response, claims 18, 21, 32, and 34 are amended, and claims 55-58 are added for consideration leaving claims 1-4, 6-25, 27-38, 40, 41, and 55-58 pending in this application, of which 1, 6, 11, 18, 22, and 32 are independent. No new matter has been added, and favorable reconsideration is respectfully requested in view of the foregoing amendments and the following remarks.

### **Claim Objections**

As a preliminary matter, the applicant has amended claims 18, 21, 32, and 34 to more clearly distinguish between, for example, the intrinsic entropy of a signal, and

a calculated entropy value. In particular, independent claim 18 now recites, *inter alia*, an encoded entropy value and a calculated entropy. Similarly, independent claim 32 now recites, *inter alia*, a first calculated entropy value and a second calculated entropy. Dependent claims 21 and 34 were also amended to employ such terms in a consistent manner based on independent claims 18 and 32, respectively.

**Rejections Under 35 U.S.C. §112, First Paragraph**

The applicant submits that claims 1-4 and 6-21 satisfy 35 U.S.C. §112, first paragraph, and that rejections related thereto must be withdrawn. In particular, the official action (page 4, items 3 and 4) appears to assert that claims 1-4 and 6-21 are recited as means-plus-function, an assertion to which the applicant does not agree. Moreover, the applicant submits that before any assertion related to a single means claim with under breadth may be properly made, such claim(s) must first be deemed to be in a format consistent with 35 U.S.C. §112, paragraph six.

The applicant has neither made any assertion and/or request to employ one or more means-plus-function claims, nor has the examiner employed the requisite three-prong test in view of 35 U.S.C. §112, paragraph six, to identify one or more claims as such. The initial burden of precise claim drafting is, of course, on the applicant, pursuant to 35 U.S.C. §112, second paragraph. See *In re Zletz*, 893 F.2d 319, 322, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989). In particular, none of claims 1-4 and 6-21, or any other claims of the instant application, recite limitations using the phrase “means for” or “step for,” which, when employed, allow a presumption that the applicant invokes 35 U.S.C. §112, paragraph six. See MPEP §2181(I).

It is well known that a claim limitation will be presumed to invoke 35 U.S.C. §112, sixth paragraph, if it meets the following three-prong analysis: (A) the claim limitations must use the phrase “means for” or “step for;” (B) the “means for” or “step

for” must be modified by functional language; and (C) the phrase “means for” or “step for” must not be modified by sufficient structure, material, or acts for achieving the specified function. See MPEP §2181(I). Additionally, examiners should apply the three-prong analysis to determine whether the claim limitation will be interpreted to invoke 35 U.S.C. §112, sixth paragraph. See MPEP, Revision 5, August 2006, page 2100-230, second column, first paragraph.

To the best of the applicant’s understanding, no such three-prong analysis has been performed by the examiner to identify claims 1-4 and 6-21, or any other claims of the instant application, as means-plus-function claims. Even if the three-prong test had been applied, an assertion to which the applicant neither agrees nor has received evidence of, the examiner will include a statement in the Office action that the claim is being treated under 35 U.S.C. §112, sixth paragraph. See MPEP, Revision 5, August 2006, page 2100-230, first column, second paragraph. The applicant has received no such statement.

Accordingly, because the examiner has not met his burden of either the three-prong test or any requisite statement that one or more claims are being treated under 35 U.S.C. §112, sixth paragraph, any attempted assertion that claims 1-4 and 6-21 are “a single means claim with under breadth” are improper and cannot stand. The applicant respectfully requests that the rejection of claims 1-4 and 6-21 be withdrawn.

#### **Rejections Under 35 U.S.C. §103**

Turning to the art rejections, the applicant respectfully submits that independent claim 1 is allowable over the art of record. Independent claim 1 is directed to an encoder that, *inter alia*, preserves an entropy of an encoded portion of the signal. None of the cited references describes or suggests an encoder that preserves an entropy of the encoded portion of the signal, as recited in claim 1.

The examiner appears to assert that Jensen et al. satisfy a deficiency of Van Der Vleuten et al. (see official action, page 5, second paragraph) to describe or suggest an encoder that preserves the entropy of the encoded portion of the signal. However, much like the failure of Van Der Vleuten et al. to describe or suggest an encoder that preserves the entropy of the encoded portion of the signal, Jensen et al. also fail to describe or suggest the subject matter recited in claim 1, as set forth in greater detail below.

While Jensen et al. describe assigning a unique set of code frequency components to represent a corresponding data state, such assignment of code frequency components facilitates minimization of code detection interference, rather than address, minimize, or eliminate conditions that warrant preservation of entropy. In fact, Jensen et al. are completely silent to any condition in which an entropy of an audio signal is reduced based on, for example, compression or decompression processes. Unlike preserving an entropy of the encoded portion of the signal as recited in claim 1, Jensen et al. are concerned with detecting code components that would otherwise be lost due to interference from other audio signal components. Accordingly, to accomplish such an objective, Jensen et al. cannot, and do not seek to preserve an entropy, but instead assign code frequency components having one or more unique properties, such as tonal masking, or narrow band masking, broadband masking. [*Jensen et al.*, 8:15-22, and 8:46-51]. Such assignment of code frequency components cannot be fairly construed as entropy preservation, much less to preserve an entropy of the encoded portion of the signal, as recited in claim 1.

Because both Van Der Vleuten et al. fail to describe or suggest encoding to preserve an entropy of the encoded portion of the signal (as stated in the official action on page 4) and Jensen et al. fail to describe or suggest entropy or preservation,

much less preserving an entropy of the encoded portion of the signal, no combination of Van Der Vleuten et al. and Jensen et al., alone or in combination, can render claim 1 obvious. The applicant respectfully requests that the rejection of independent claim 1 be withdrawn for at least the foregoing reasons. Accordingly, the rejection of claims 2-4, dependent upon independent claim 1, must also be withdrawn for the foregoing reasons.

Independent claims 6, 11, and 22 are also patentable over the art of record for at least the reasons set forth above in connection with claim 1. Thus, the applicant respectfully submits that these claims, and all claims dependent thereon, are also in condition for allowance. Reconsideration is respectfully requested.

New dependent claims 55 through 58 are also allowable. In particular, these claims depend directly from corresponding independent claims 1, 6, 11, and 22 that are believed to be allowable over the art of record.

Thus, for at least the foregoing reasons, the applicant respectfully submits that all pending claims are now in condition for allowance. If there are any remaining issues in this application, the applicants urge the examiner to contact the undersigned attorney at the number listed below.

The Commissioner is authorized to charge any deficiency in the enclosed check toward payment of any fee due for the filing of this paper to deposit account number 50-2455.

Respectfully submitted,

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**November 8, 2007**